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EXAMINER

TIV, BACKHEAN

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application N .

09/812,401

Applicant(s)

BRIGHT ET AL.

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-72, 74, 76, 78 and 80 is/are rejected.  
7) ☐ Claim(s) 73, 75, 77, 79 and 81 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

This action is a response to the amendment filed on 10/12/04. Claims 1-81 are pending in this application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 22-24, 72,74 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/74409 issued to Larson in view of WO 00/79827 issued to Lamb in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel).

As per claim 1,5 Larson teaches a multiple-protocol home location register(page 2, line 13) comprising:

a receiver for receiving, from a requesting network of at least two networks, a network request according to one of at least two network protocols(page 3, lines 13-17);

However Larson does not explicitly teach

a processor, wherein the processor is arranged and constructed to generate network messages according to the at least two network

protocols and to process the network request to obtain information requested by the network request;  
a transmitter, operably coupled to the processor, for relaying the requested information to at least one of the requesting network and a destination network; a standard HLR.

Lamb teaches

a processor, wherein the processor is arranged and constructed to generate network messages according to the at least two network protocols and to process the network request to obtain information requested by the network request(page 6, lines 13-32);  
a transmitter, operably coupled to the processor, for relaying the requested information to at least one of the requesting network and a destination network(page 6, lines 21-32).

Therefore it would have been obvious at the time of the invention to modify the system of Larson to explicitly add a processor, wherein the processor is arranged and constructed to generate network messages according to the at least two network protocols and to process the network request to obtain information requested by the network request; a transmitter, operably coupled to the processor, for relaying the requested information to at least one of the requesting network and a destination network as taught by Lamb in order to provide seamless, wireless telecommunication services to customers that move between disparate networks(page 3, lines 18-19).

One ordinary skilled in the art at the time of the invention would have been motivated to modify Lamb and Larson in order to provide wireless communication to customers.

Larson in view of Lamb does not teach a standard HLR.

Gessel teaches a standard HLR(col.11, lines 4, 16-22)

Therefore it would have been obvious at the time of the invention to modify the system of Larson in view of Lamb to use a standard HLR as taught by Gessel instead of using a HLR with a gateway in order to update location in a mobile network of a subscriber(Gessel, col.11, lines 1-5).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Larson, Lamb, and Gessel in order to provide a system update information on an HLR(Gessel, col.11, lines 16-22).

As per claim 2, the multiple-protocol home location register of claim 1, wherein the processor is further arranged and constructed to translate messages according to the at least two network protocols(Larson, page 2, lines 21-25).

As per claim 3, the multiple-protocol home location register of claim 1, wherein the requested information is generated in response to a communication device request to communicate with a serving network(Lamb, page 6, lines 21-25). Motivation to combine set forth in claim 1.

As per claim 4, the multiple-protocol home location register of claim 1, wherein the processor is further arranged and constructed to send a profile for a communication

Art Unit: 2151

device to a serving network and to format the profile according to the serving network's protocol(Lamb, page 6, lines 23-28). Motivation to combine set forth in claim 1.

As per claim 6, the method of claim 5, wherein the step of processing comprises the step of translating the network request(Larson, page 2, lines 21-25).

As per claim 7, the method of claim 5, wherein the step of processing comprises the step of converting a Location Request message to a Provide Roaming Number message(Lamb, page 5, lines 28-30). Motivation to combine set forth in claim 1.

As per claim 8, the method of claim 5, wherein the step of processing comprises the step of converting a Send Routing Information message to a Routing Request message(Lamb, Fig.5a-5c). Motivation to combine set forth in claim 1.

As per claim 9, the method of claim 5, wherein the step of processing comprises the step of distributing, throughout the multiple-protocol home location register, subscriber information for a plurality of communication devices(Lamb, page 14, lines 25-27). Motivation to combine set forth in claim 1.

As per claim 10, the method of claim 5, wherein the step of processing comprises the step of determining and storing a protocol type and an address for an infrastructure device(Lamb, page 6, lines13-32). Motivation to combine set forth in claim 1.

As per claim 11, the method of claim 10, wherein the infrastructure device is a gateway mobile switching center(Lamb, page1, lines 21-23). Motivation to combine set forth in claim 1.

As per claim 12, the method of claim 5, wherein the step of processing comprises the step of determining and storing a protocol type and an address for a communication device(Lamb, page 6, lines 13-32). Motivation to combine set forth in claim 1.

As per claim 13, the method of claim 12, wherein the step of processing comprises the step of determining and storing a protocol type and an address for a serving network for the communication device(Lamb, page 6, lines 13-32).

As per claim 14, the method of claim 5, wherein the multiple-protocol home location register receives a network request, regarding a communication device, from an infrastructure device, regardless of the communication device's native mode protocol(Lamb, page 6, lines 13-32). Motivation to combine set forth in claim 1.

As per claim 15, the method of claim 5, further comprising the step of detecting a protocol type for an infrastructure device, and when the protocol type for the infrastructure device is not a first network protocol, communicating through a mediation device to a home location register of the protocol type for the infrastructure device(Lamb, Fig.5a-5c). Motivation to combine set forth in claim 1.

As per claim 16, the method of claim 5, wherein the at least two networks comprise at least one of a terminating mobile switching center, a visited mobile switching center, a gateway mobile switching center, a packet gateway, and an internet protocol gateway(Lamb, page 1, lines 20-22). Motivation to combine set forth in claim 1.

As per claim 17, the method of claim 5, further comprising the step of storing call forwarding information such that processing for call forwarded communications takes

Art Unit: 2151

place between a mediation device in the multiple-protocol home location register and a terminating mobile switching center(Larson, Fig.3).

As per claim 18, the method of claim 5, further comprising the step of issuing an instruction to a previous mobile switching center to delete a visited location register for a communication device(Lamb, page 7, lines 1-5). Motivation to combine set forth in claim 1.

As per claim 22, the method of claim 5, wherein the step of processing comprises the steps of routing a pre-paid call, originating according to a first protocol of the at least two network protocols, to an infrastructure device operating according to a second protocol of the at least two network protocols and handling the pre-paid call according to normal call processing procedures for the second protocol(Lamb, page 1, line 21-page 2, line 32). Motivation to combine set forth in claim 1.

As per claim 23, the method of claim 5, wherein the at least two network comprise at least one of a terminating mobile switching center, a visited mobile switching center, a gateway mobile switching center, a packet gateway, and an internet protocol gateway(Lamb, Figs 1-7c). Motivation to combine set forth in claim 1.

As per claim 24, the method of claim 5, wherein the destination network is determined by a location for a communication device associated with the network request(Lamb, page 11, line 1-10). Motivation to combine set forth in claim 1.

As per claim 72, 74, wherein the standard HLR comprises a standalone HLR(Gessel, col.11, lines 4, 16-22).



Claims 19,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/74409 issued to Larson in view of WO 00/79827 issued to Lamb in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) further view of US Patent 6,556,820 issued to Le et al.(Le).

Larson in view of Lamb in further view of Gessel teaches all the limitations of claim 5, however does not explicitly teach as per claim 19, the method of claim 5, wherein the step of processing comprises the step of storing an identification of an infrastructure device that terminates a call.

Le teaches wherein the step of processing comprises the step of storing an identification of an infrastructure device that terminates a call(col.9,lines 35-40).

Therefore it would have been obvious at the time of the invention to modify the method of Larson in view of Lamb in further view of Gessel to add wherein the step of processing comprises the step of storing an identification of an infrastructure device that terminates a call as taught by Le in order to provide mobility management(Le, col.3,lines 2-4).

One of ordinary skilled in the art at the time of the invention would have been motivated to combine Larson, Lamb, Gessel, and Le to provide a method to mobility management.

As per claim 20, the method of claim 5, wherein the step of processing comprises the step of determining whether a communication device supports multiple-mode operation(Le, col.10, lines 60-67). Motivation to combine set forth in claim 19.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/74409 issued to Larson in view of WO 00/79827 issued to Lamb in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view of US Patent 5,845,982 issued to Chambers et al.(Chambers).

Larson in view of Lamb in further view of Gessel teaches all the limitations of claim 5, however does not explicitly teaches 21, the method of claim 5, wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol.

Chambers teaches wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol(col.11, lines 59-60).

Therefore it would have been obvious at the time of the invention to modify the method of Larson in view of Lamb in further view of Gessel to add wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol as taught by Chambers in order to provide a communication system with a structural architecture that provides greater flexibility in terms of MSISDN and IMSI management(Chambers, col.3, lines 10-15).

One ordinary skilled in the-art at the time of the invention would have been motivated to combine the Larson, Lamb, Gessel, and Chambers in order to provide a communication with structural architecture.

Claims 25-43,45-53,55-61,68-70,76,78,80 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel).

As per claim 25, 39, 53 Lamb teaches a multiple-protocol home location register (HLR) comprising:

a mediation device, operably coupled to the first HLR and the second HLR, wherein the mediation device is arranged and constructed to generate network messages according to the first network protocol and the second network(protocol(page 6, lines 13-31); protocol, such that the multiple-protocol HLR provides HLR capability for a plurality of communication devices utilizing any of the first network protocol and the second network protocol(page 2, line 13).

Lamb however does not explicitly teach a first HLR arranged and constructed to provide a first network protocol; a second HLR arranged and constructed to provide a second network protocol; a standard HLR.

Gallagher teaches a first HLR arranged and constructed to provide a first network protocol(Fig.1, element 110A, col. 5, lines 5-41); a second HLR arranged and constructed to provide a second network protocol(Fig.1, element 110B, col.5, lines 5-41).

Therefore it would have been obvious at the time of the invention to modify the system of Lamb to explicitly add a first HLR arranged and constructed to provide a first network protocol and a second HLR arranged and constructed to provide a second network protocol as taught by Gallagher in order to enable two or more communication system, each supporting ad different and possible incompatible signaling protocol to communicate with each other (Gallagher, col.3, lines 46-50).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher to provide different protocols for communication.

Larson in view of Gallagher does not teach a standard HLR.

Gessel teaches a standard HLR(col.11, lines 4, 16-22)

Therefore it would have been obvious at the time of the invention to modify the system of Larson in view of Gallagher to use a standard HLR as taught by Gessel instead of using a HLR with a gateway in order to update location in a mobile network of a subscriber(Gessel, col.11, lines 1-5).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Larson, Gallagher, and Gessel in order to provide a system update information on an HLR(Gessel, col.11, lines 16-22).

As per claim 26, the multiple-protocol HLR of claim 25, wherein the mediation device is further arranged and constructed to translate messages between the first network protocol and the second network protocol(Lamb, page 7, line 20-page 8 line 14).

As per claim 27, the multiple-protocol HLR of claim 25, wherein the mediation device is arranged and constructed to convert a Provide Roaming Number message to a Location Request message(Lamb, page 5, line32-page 6, line 2).

As per claim 28, the multiple-protocol HLR of claim 25, wherein the mediation device is arranged and constructed to convert a Routing Request message to a Send Routing Information message(Lamb, Fig.5a-5c)..

As per claim 29, the multiple-protocol HLR of claim 25, further comprising a provisioning gateway, operably coupled to the first HLR and the second HLR, wherein the provisioning gateway is arranged and constructed to distribute, among the first HLR and the second HLR, subscriber information for the plurality of communication devices(Gallagher, col.5,lines 5-41). Motivation to combine set forth in claim 25.

As per claim 30, the multiple-protocol HLR of claim 25, wherein the first and second network protocols comprise at least one of ANSI-41, GSM MAP, SIP, H.323, AAA, and MIP(Lamb, page 14, lines 20-24).

As per claim 31, the multiple-protocol HLR of claim 25, wherein the mediation device is further arranged and constructed to determine and store a protocol type and an address for an infrastructure device(Lamb, page 6, lines 13-32).

As per claim 32, the multiple-protocol HLR of claim 31, wherein the infrastructure device is a gateway mobile switching center(Lamb, page 1, lines 21-23).

As per claim 33, the multiple-protocol HLR of claim 31, wherein the mediation device is further arranged and constructed to determine and store a protocol type and an address for a communication device(Lamb, page 6, lines 13-32).

As per claim 34, the multiple-protocol HLR of claim 33, wherein the mediation device is further arranged and constructed to determine and store a protocol type and an address for a serving network for the communication device(Lamb, page 6, lines 13-32).

As per claim 35, the multiple-protocol HLR of claim 25, wherein the first HLR is further arranged and constructed to receive a query, regarding a communication device, from an infrastructure device supporting the first network protocol, regardless of whether the communication device's native mode is of the first network protocol(Lamb, page 6, lines 13-32).

As per claim 36, the multiple-protocol HLR of claim 25, wherein the first HLR is further arranged and constructed to detect whether a protocol type for an infrastructure device, and when the protocol type for the infrastructure device is not the first network protocol, to communicate through the mediation device to an HLR of the protocol type for the infrastructure device(Gallagher, col.5, lines 43-67). Motivation to combine set forth in claim 25.

As per claim 37, the multiple-protocol HLR of claim 25, wherein the mediation device is further arranged and constructed to store call forwarding information such that processing for call forwarded communications takes place between the mediation device and a terminating mobile switching center(Lamb, Fig.5c).

As per claim 38, the multiple-protocol HLR of claim 25, wherein the plurality of communication devices comprise at least one of a terminating mobile switching center,

a visited mobile switching center, a gateway mobile switching center, a packet gateway, and an internet protocol gateway(Lamb, Fig.5c).

As per claim 40, the system of claim 39, wherein the at least one query is generated in response to a communication device request to communicate with a serving network(Lamb, Fig.4c).

As per claim 41, the system of claim 40, wherein a profile for the communication device is sent to the serving network and the profile is formatted according to the serving network's protocol(Lamb, lines 13-32).

As per claim 42, the system of claim 40, wherein the serving network utilizes the first network protocol(Lamb, lines 13-32).

As per claim 43, the system of claim 39, wherein the multiple-protocol home location register is further arranged and constructed to provide call forwarding functionality(Gallagher, col.1, lines 26-27). Motivation to combine set forth in claim 39.

Claim 45 is of the same scope as claim 29, therefore is rejected based on the same rationale(see claim 29 rejection).

Claim 46 is of the same scope as claim 30, therefore is rejected based on the same rationale(see claim 30 rejection).

As per claim 47, the system of claim 39, wherein the multiple-protocol home location register is further arranged and constructed to determine and store a protocol type and an address for the first standard HLR(Gallagher, col.6, lines 23-35). Motivation to combine set forth in claim 39.

As per claim 48, the system of claim 39, wherein the first standard HLR is further arranged and constructed to receive a request from a communication device regardless of whether the communication device's native mode is of the first network protocol(Lamb, page 6, lines 13-32).

As per claim 49, the system of claim 39, wherein the multiple-protocol home location register is further arranged and constructed to store call forwarding information such that processing for call forwarded communications takes place between the multiple-protocol home location register and the second standard HLR(Gallagher, col.1, lines 26-67).Motivation to combine set forth in claim 39.

Claim 50 is of the same scope as claim 38, therefore is rejected based on the same rationale(see claim 38 rejection).

As per claim 51, the system of claim 39, wherein the first standard HLR generates the at least one query for a gateway mobile switching center(Lamb, Fig.5c).

As per claim 52, the system of claim 39, wherein the second standard HLR handles the at least one query for a terminating mobile switching center(Lamb, Fig.5c).

As per claim 55, the method of claim 53, wherein the step of processing comprises the step of converting a Location Request message to a Provide Roaming Number message (Lamb, page 5, lines 28-30).

As per claim 56, the method of claim 53, wherein the step of processing comprises the step of converting a Routing Request message to a Send Routing Information message(Lamb, Fig.5a-5c).



Claim 57 is of the same scope as claim 29, therefore is rejected based on the same rationale(see claim 29 rejection).

Claim 58 is of the same scope as claim 47, therefore is rejected based on the same rationale(see claim 47 rejection).

As per claim 59, the method of claim 53, wherein the multiple-protocol home location register receives a network request, regarding a communication device, from the first standard HLR, regardless of the communication device's native mode protocol(Lamb, page 6, lines 13-32).

As per claim 60, the method of claim 53, further comprising the step of detecting a protocol type for the second infrastructure device, and when the protocol type for the second infrastructure device is not the first network protocol, processing the first network protocol query according to the protocol type for the second infrastructure device(Lamb, page 6, 13-32).

Claim 61 is of the same scope as claim 49, therefore is rejected based on the same rationale(see claim 49 rejection).

Claim 68 is of the same scope as claim 38, therefore is rejected based on the same rationale(see claim 38 rejection).

Claim 69 is of the same scope as claim 51, therefore is rejected based on the same rationale(see claim 51 rejection).

Claim 70 is of the same scope as claim 52, therefore is rejected based on the same rationale(see claim 52 rejection).

As per claim 76,78,80, wherein the standard HLR comprises a standalone HLR(Gessel, col.11, lines 4, 16-22).

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view of US Patent 6,504,839 issued to Valentine et al.(Valentine).

Lamb in view of Gallagher in further view of Gessel teaches all the limitations of claim 39, however does not explicitly teach as per claim 44, the system of claim 39, wherein the call request is a call termination request.

Valentine teaches wherein the call request is a call termination request(col.4,lines 66-67).

Therefore it would have been obvious at the time of the invention to modify the system of Lamb in view of Gallagher in further view of Gessel to add wherein the call request is a call termination request as taught by Valentine in order to route information from a packet-switched network to a mobile device(col.2,lines 6-10).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher, Gessel, and Valentine to provide a system to route information.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view WO 00/74409 issued to Larson.

Lamb in view of Gallagher in further view of Gessel teaches all the limitations in claim 53, however, does not explicitly teach as per claim 54, the method of claim 53, wherein the step of processing comprises the step of translating the network request.

Larson teaches wherein the step of processing comprises the step of translating the network request (page 2, lines 21-25).

Therefore it would have been obvious at the time of the invention to modify the method as taught by Lamb in view of Gallagher in further view of Gessel to add wherein the step of processing comprises the step of translating the network request as taught by Larson in order to provide an integrated home location register and wireless office system(page, lines 6-9).

One of ordinary skilled in the art at the time of the invention would have been motivated to combine Lambe, Gallagher, Gessel, and Larson to provide a method to use a HLR in different environments.

Claims 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et

Art Unit: 2151

al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view of US Patent 5,526,401 issued to Roach, Jr. et al.(Roach).

Lamb in view of Gallagher in further view of Gessel teaches all the limitations of claim 53, however does not explicitly teach as per 62, the method of claim 53, further comprising the step of issuing an instruction to a previous mobile switching center to delete a visited location register for a communication device.

Roach teaches , further comprising the step of issuing an instruction to a previous mobile switching center to delete a visited location register for a communication device(col.16, lines 4-18)

Therefore it would have been obvious at the time of the invention to modify the method of Lamb in view of Gallagher in further view of Gessel to add further comprising the step of issuing an instruction to a previous mobile switching center to delete a visited location register for a communication device as taught by Roach in order to provide a method of communicate data via a cellular network(col.4, lines 29-35).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher, Gessel, and Roach in order to provide a method to use a cellular network.

As per claim 63, the method of claim 53, wherein the step of processing comprises the step of storing an identification of the second infrastructure device for a call(Roach, col.6,lines 40-50). Motivation to combine set forth in claim 62.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view US Patent 5,845,215 issued to Henry et al.(Henry).

Lamb in view of Gallagher in further view of Gessel teaches all the limitations of claim 53 however does not explicitly teach as per claim 64, the method of claim 53, wherein the step of processing comprises the step of determining whether a communication device supports multiple-mode operation.

Henry teaches wherein the step of processing comprises the step of determining whether a communication device supports multiple-mode operation(col.12,lines 63-67).

Therefore it would have been obvious at the time of the invention to modify the method of Lamb in view of Gallagher in further view of Gessel to add wherein the step of processing comprises the step of determining whether a communication device supports multiple-mode operation as taught by Henry in order to provide a method of supporting a plurality of mobile station operation modes in a wireless communication system.

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher, Gessel, and Henry to operate in a wireless communication system.

Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view of US Patent 5,845,982 issued to Chambers et al.(Chambers).

Lamb in view of Gallagher in further view of Gessel teaches all the limitations of claim 53 however does not explicitly teaches as per claim 65, the method of claim 53, wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol.

Chambers teaches wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol(col.11, lines 59-60).

Therefore it would have been obvious at the time of the invention to modify the method of Lamb in view of Gallagher in further view of Gessel to add wherein the step of processing comprises the step of converting a short messaging service message from a first network protocol to a second network protocol as taught by Chambers in order to provide a communication system with a structural architecture that provides greater flexibility in terms of MSISDN and IMSI management(col.3, lines 10-15).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher, Gessel, and Chambers in order for a structural architecture communication system.

Claims 66,67,71 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/79827 issued to Lamb in view of US Patent 5,933,784 issued to Gallagher et al.(Gallagher) in further view of US Patent 5,732,213 issued to Gessel et al.(Gessel) in further view of US Patent 6,035,025 issued to Hanson.

Lamb in view of Gallagher in further view of Gessel teaches all the limitations of claim 53 and teaches different types of protocol, however does not explicitly teach as per claim 67, the method of claim 66, wherein the step of routing is based on at least one of a prefix plus a called party number and a different number.

Hanson teaches wherein the step of routing is based on at least one of a prefix plus a called party number and a different number(col.6, lines 15-17).

Therefore it would have been obvious at the time of the invention to modify the method of Lamb in view of Gallagher in further view of Gessel to add wherein the step of routing is based on at least one of a prefix plus a called party number and a different number as taught by Hanson in order to have a system for bundled telecommunications(col.1, lines 16-18).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Lamb, Gallagher, Gessel and Hanson in order to route information to the correct location.

As per claim 66, the method of claim 53, wherein the step of processing comprises the steps of routing a pre-paid call, originating according to the first protocol, to a third infrastructure device and handling the pre-paid call according to normal call

Art Unit: 2151

processing procedures for the second protocol(Lamb, page 6, lines 13-32,Hanson Fig.1, Gallagher, Fig.7). Motivation to combine set forth above.

As per claim 71, the method of claim 53, wherein the step of processing comprises the steps of routing a call, originating according to the first protocol, to a third infrastructure device of the second protocol and handling the call according to normal call processing procedures for the second protocol(Lamb, page 6, lines 13-32,Hanson Fig.1, Gallagher, Fig.7). Motivation to combine set forth above.

#### ***Allowable Subject Matter***

Claims 73,75,77,79,81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant has amended claims 11,3,16 therefore the examiner withdraws all claim objections and 112 2<sup>nd</sup> paragraph rejection.

Applicant's arguments with respect to claim 1-71 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.



Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571)272-3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2151

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1/6/05



**ZARNI MAUNG**  
SUPERVISORY PATENT EXAMINER